

American Bee Journal



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CHICAGO, ILL., JUNE 1, 1905

No. 22

WEEKLY

Temporary Officers of the First National Bee-Keepers' Convention

HELD AT INDIANAPOLIS, DECEMBER 21 AND 22, 1870.

(See page 388.)



1. Vice-Pres. Dr. G. Bohrer
2. Sec. M. M. Baldrige

3. Pres. A. F. Moon
4. Asst. Sec. W. F. Clarke

5. Vice-Pres. Dr. E. Gallup
6. Treas. N. C. Mitchell

REAR QUEENS

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In this outfit are embraced the best points of the best systems in use. It will give satisfaction to the amateur as well as the expert. The cell-cups are made of wood, wax-coated. No melted wax is used in their manipulation, as they are attached to the cell-stick by means of a small nail-point.

The nursery cage combines the features of nursery and introducing cages. By their use a queen can be released on the candy plan or caged in the hive as desired.

In connection with the outfit goes a booklet on queen-rearing—one which ought to put the veriest amateur on the high road to success. Outfit comprises 3 cell-bars with 50 waxed wooden cells, one frame cages, (20); one cell-forming stick; one set grafting-tools, and a book on queen-rearing, \$4.50.

Wood cell-cup, with point for attaching to bar, 50c per 100; \$4.00 per 1000.

Same, waxed, ready for use, 75c per 100; \$6.00 per 1000; Titoff wire nursery-cages, 15c each; \$1.35 for 10; \$12.50 per 100.

Frame for holding 20 cages, including cages, \$3.00.

Cell-stick, each 10c; \$1.00 per dozen.

Transferring-needle, double-ended and nickel-plated, 15c.

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16 Waxed flange-cups 12 Transfer-cages



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2 Blank bars 2 Cell-bars
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10 Comp. mating-boxes 2 Swarth. nursery-cages
1 Bar-holder 24 Transfer-cages
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		Post extra
Bar-holder	\$.10	4 cents
Blank bar05	4 "
Bottle feeder10	5 "
Bulb filler and feeder75	8 "
Breeding-queen hive	1.00	
16-hole cell-bar .....	.10	2 "
Cage-pocket .....	.25	9 "
Flange-cups, unwaxed, 1c each; per 100 .....	.75	9 "
Flange-cups, waxed, 2c each; per 100	1.75	14 "
Grace cell-compressor, each	1.75	14 "
Grafting-needle, each .....	.15	1 "
Grafting-plug, each .....	.10	1 "
Grafting-stick, each .....	.10	1 "
Holding-frame, each .....	.10	5 "
Incubating-cage, each .....	.35	7 "
Mating-boxes, complete, each 20c; 10	1.50	12 "
Nursery-cages, complete, waxed cell-cup .....	.35	5 "
Nursery-cages, no cups .....	.25	4 "
Swarm-box, with lid	1.00	
Swarm-box lid only25	
Trap-box50	
T stands, each10	6 "
Transfer-cages10	2 "

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AMERICAN BEE JOURNAL

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GEORGE W. YORK, Editor

CHICAGO, ILL., JUNE 1, 1905

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THE AMERICAN BEE JOURNAL is absolutely an independent publication, and not connected with any bee-supply business whatsoever. It stands entirely upon its merits as an educative force in the field of bee-keeping, and as a medium for legitimate advertisers in apicultural or other lines. It is the oldest, and only weekly, journal of its kind in America. Its publishers believe that it deserves to be in the hands of every would-be progressive successful bee-keeper in the land. It is in its 45th year, and to-day is acknowledged to be better in every way than at any time during its long and honorable history.

Editorial Notes and Comments

First National Bee-Convention

Dr. G. Bohrer, on another page, gives a most interesting account of the first attempt to organize a bee-keepers' association in the United States. Being a member himself he speaks as an eye-witness. He gave something along the same line at the opening of the St. Louis convention last September, but the reporter failed to get it. We regretted it very much, as it was an extremely interesting address, and being of historical value we felt that it should have been preserved. So, afterward, we requested Dr. B. to write it out as nearly as he could recall, and so we have it for our readers this week.

In addition to the contribution by Dr. Bohrer, he has kindly furnished a picture of a group of men who helped organize the first bee-keepers' association in America, which we present on the front page. We believe the only members of that group that are still living are Dr. Bohrer, of Kansas, and M. M. Baldrige, of Illinois. If any of the others are still with us, we would be pleased to announce it.

We are sure Dr. B.'s article will be greatly appreciated by all our readers.

The Honey-Producers' League

We believe that so far practically all the bee-papers of this continent have approved this new organization in the main. Of course, it would be expected that some of the details would not suit all, though the few objections that have been advanced by some are not insurmountable, but can be met and corrected later on. What we mean is, that any slight defects in the constitution or management of the League can easily be rectified at the annual election next March, if by that time it is thought best to make any changes. What is needed now is to put the League in a

position to do some effective work for bee-keepers before, or by the time, the new honey crop begins to come on the market. If during the next 30 days a sufficient number of bee-keepers would send in their annual dues, the Executive Board could plan a great advertising campaign that could be put into active operation so as to prepare the public for the reception and consumption of this season's crop of honey about as rapidly as it comes on the market.

We may say that practically all the United States bee-papers have published in full the Constitution and Prospectus of the League, just as we gave it on page 259.

The Modern Farmer and Busy Bee had this to say about it:

The latest candidate for favors among the bee-keepers of the United States is The Honey-Producers' League. Its object, as expressed in the Constitution, is to create a large demand for honey by popularizing its use among the consuming public through advertising in newspapers and magazines its great value as a food, and by such other methods as may be considered advisable by the Executive Board. Also, by publication of facts concerning the production of honey to counteract any misrepresentation of the same. . . . The aim of the League is a good one, and the indications are that it will receive the hearty support of the leading bee-keepers of the United States.

Editor Craig, of the Canadian Bee Journal, in his May issue, writes as follows:

The Honey-Producers' League, recently organized in the United States, is, we believe, going to be one of the most useful movements yet inaugurated among bee-keepers. We understand that for the present at least the effort will be confined to the United States. Perhaps by and by the organization will see its way to extend its border and take in Canada. At any rate, we will be helped indirectly. Something of this sort may perhaps be taken up in connection with our Ontario Association. If space permits we will next month give the text of the Prospectus and Constitution.

"A York County Bee-Keeper," in the same paper, expresses himself thus:

When reading over the Constitution of The Honey-Producers' League, the thought came to me, "They can fight successfully honey adulteration, but how are they going to get at the producers of unripe honey?" While this organization has plenty of difficulties in the way, I think the one mentioned will be one of the most formidable. What's the matter with The Honey-Producers' League, anyway? We think it a splendid idea, and hope that in some way arrangements can be made for us Canucks to take part in the benefits. What say you, brethren?

Surely, such expressions of confidence and encouragement are appreciated, and should result in bee-keepers coming forward with their dues and thus aid in the proposed effort to help themselves through a general advertising of honey among the public.

On another page of this number Mr. J. E. Johnson offers some good suggestions and friendly criticisms. We hope his whole article will be read carefully. What the bee-keepers in his locality propose to do about selling their honey crop should be followed by the bee-keepers of every locality. And that should be done in addition to the advertising that the League is organized to do.

Mr. Johnson seems to think that the organizers of the League have made some mistakes. But let us see about that.

First, we think it is not likely that a bee-supply manufacturing concern that does a business of say \$100,000 or more a year, is going to raise prices in order to pay its small annual dues as members of the League.

As to what Mr. Johnson thinks is a second mistake, we may say that the League has not definitely decided to offer a \$10,000 reward. It may offer none at all.

As to the third mistake, there is no danger of starting out too big in the advertising line, for even \$5000 would be too small an amount with which to do big advertising. But we must start in a way that will impress the people that bee-keeping is more than a two-by-four business. And then, having started the advertising it should be continued several months in succession in each publication used.

It may not be known to many, but a single cream separator firm spends over \$50,000 a year in advertising; several single poultry incubator firms spend \$10,000 or more annually. We believe there is a certain stock food firm that spends over \$100,000 a year in advertising. A full-page advertisement in the Ladies' Home Journal costs about \$4000 for just one

time. But it goes every month into over a million homes. Think of it! But the League would perhaps take only about one-eighth of a page in that Journal, if it went into it at all. It would not pay to take say a one-inch space in such a publication.

Let us assure bee-keepers that the Executive Board of the League will not do anything rash, or without due consideration. They all desire only the best interests of the pursuit of bee-keeping, for, their own success, like that of the honey-producers, depends upon the prosperity and success to be derived from the production and sale of honey.

Use of Springs in Supers

Super springs are found on the list of bee-keepers' supplies; but it is doubtful that they are used as generally as they would be if their advantages were known more fully. The common way of wedging up a super of sections with a straight stick may seem quite satisfactory to one who has never given the matter much attention, because when the

wedge is first put in the sections are pressed together very tightly—more tightly, indeed, than the springs—but sections have a way of shrinking, especially when wet before being put together, as so frequently they must be to prevent breaking, and so it often happens that by the time the supers are put on the hives the wedges have dropped down. Springs accommodate themselves to this shrinking of the sections, and although the pressure is not quite so much, there is no entire cessation of pressure as with the wooden wedges—if straight sticks can be called wedges.

Another thing: There is no little variation in the size of wedge needed, and it is not convenient to have wedges of varying size; the result is that some supers are too loosely wedged, and some so tightly that there is danger that the supers may be pulled apart at the corners; the springs accommodate themselves to these different sizes.

The springs are easier put in; easier to take out.

It is an easy thing to try springs in a few supers. If they prove an advantage the number can be increased.

HISTORICAL

The First Convention of Bee-Keepers Held in the United States of America

BY DR. G. BOHRER

During the summer and fall of 1870 the matter of calling a convention of bee-keepers of the United States and Canada was agitated, and resulted in the decision that it should be held in the city of Indianapolis. It was held Dec. 21 of that year. Mr. N. C. Mitchell, who was then publishing what was known as the Illustrated Bee Journal, in Indianapolis, was one of the prime movers in arousing interest in favor of a convention of national character. His efforts were seconded by such men as Adam Grimm and A. H. Hart, of Wisconsin; E. Rude and A. F. Moon, of Michigan; Elisha Gallup, of Iowa; M. M. Baldrige, of Illinois, and others of that State whose names I can not now recall; Aaron Benedict, of Ohio; T. R. Allen, of New York; Dr. Hamlin, of Tennessee; Gen. D. L. Adair and J. H. Nesbit, of Kentucky; Mr. Atkins and his wife; and Mr. Seofield, Mr. Barber and myself lent the movement our support in Indiana. There were some others in Indiana who favored it, and Seth Hoagland and R. Bickford, of Pennsylvania, also supported it. R. C. Otis, of Wisconsin, attended the convention. He was the owner of much of the territory covered by Mr. Langstroth's patent. He came to examine the different hives there for the purpose of finding out if any were infringements on the Langstroth invention, and nearly or quite all were, although but one or two of the exhibitors in attendance would admit it.

A delegate to this convention from Utah, whose name I have also forgotten, purchased 100 colonies of Italian bees from Mr. Grimm while at the convention, paying him \$1500 for them. This was probably the largest deal in bees that had ever occurred in this country up to that time.

At this convention A. F. Moon was elected president, and I think there was also a secretary elected—M. M. Baldrige, of Illinois. The proceedings of this convention were similar to those of bee-keepers' conventions nowadays, except that very little was said about hives, further than to agree that to successfully manage bees the combs must be movable. There was, however, quite a feeling of anxiety on the part of most of the owners of the different patterns of movable comb hives, it being generally believed that the presence of Mr. Otis meant unfriendliness toward them, which might end in prosecution for infringement on the Langstroth patent, which Mr.

Otis then controlled in most, if not all, of the States and Territories.

On motion of R. C. Otis, Rev. L. L. Langstroth was made an honorary member of the Association.

During the afternoon of the first day's proceedings a telegram came to the convention from H. A. King, of New York, which read as follows, or nearly so:

"Officers and Members of the Bee-Keepers' Convention at Indianapolis, Ind.:—You are earnestly requested to meet with your bee-keeping brethren at Cincinnati, Ohio,"—giving the date, which, I think, was in February following. The convention then in session was called the "North American Bee-Association."

Mr. King was the maker of the "American" hive, and while he was selling a straight-out infringement on the Langstroth patent, he had not admitted it up to that time, and was selling more hives than any other one dealer in the country. He was a most persistent advertiser, and sold a bee-book which was quite a help to the beginners in bee-keeping.

After some discussion it was decided to accept the invitation to attend the convention at Cincinnati.

Mr. King's reason for not attending the convention at Indianapolis came out in the following statement, which he made through the press:

"The convention has been called to meet at Cincinnati because it is centrally located, free from local influences, and near the home of Mr. Langstroth, whom we want present."

Most of the bee-keepers at the Indianapolis convention were friends of Mr. Langstroth and his invention. Mr. King knew this, and also knew that most of those that were not were friends to the "Buckeye" hive, of which Mr. N. C. Mitchell was the inventor.

When the time for the election of officers for the ensuing year was announced, Mr. Otis moved that in view of what Mr. Langstroth had done in promoting the interests of bee-keeping, not only in this but in other countries, he be crowned with the honor of being the President of the North American Bee-Keepers' Association for the ensuing year. The motion was warmly seconded, and Pres. Moon was authorized to cast the unanimous ballot of the Association for him.

Mr. Langstroth was present at the Cincinnati convention, also H. A. King, A. I. Root, Mrs. Ellen S. Tupper, and nearly all who had attended the Indianapolis convention. A motion was made by Mr. King on the second day of the convention that the bee-keepers present be requested to donate a liberal sum of money to Mr. Langstroth. I opposed the motion on the ground that it would be humiliating to the man who had done so much for the interests of bee-keeping, and that every one who was deriving benefit from his invention had not paid for the right to use it, as I had done, or Mr. Langstroth would not stand in need of donations from any source. I also stated that I had not to exceed a thousand dollars with me, and might run short of funds in case I gave Mr. Langstroth such a sum as all present ought to give if the benefit was to amount to much. Rev. F. W. Clarke, of Canada, supported my statement, saying that he had heard something about Mr. Langstroth, and that among other things he had learned that a number of persons had fared sumptuously as a result of having sold to a great extent hives that embraced the Langstroth invention, and suggested that they be requested to disgorge and divide profits with Mr. Langstroth, which would probably relieve his wants. This about killed the donation move, and Mr. A. I. Root afterward wrote that at the time he censured me for having blocked this move, but that after more mature thought he concluded that I was not far wrong.

After a two days' session devoted principally to the usual subjects, this convention—called the American Bee-Keepers' Association—adjourned to meet one year later at Cleveland, Ohio, it being agreed by the bee-keepers that they would meet at the above-named city at the same time and place, disband as separate organizations, and organize as one body. There was no cause or feeling of any sort to prevent such a union, as the masses of bee-keepers had no bone of contention. The feeling that existed between King, Mitchell, and other patent-hive men was left for them to adjust either in the courts or among themselves. Mr. Quinby, the author of "Mysteries of Bee-Keeping Explained," was present, and was made temporary chairman. The late Capt. Hetherington, of New York, and Dr. J. P. Kirtland, of Cleveland, were at this convention, and also Prof. A. J. Cook, then of Lansing, Mich., but now of California. Dr. Kirtland was one of the first men of talent and rare scientific acquirements to make note of Mr. Langstroth's invention, and call public attention to its great worth.

I made a motion for the election of a treasurer, which was seconded by Prof. Cook, Rev. F. W. Clarke, and others. It was antagonized by Mr. King, on the ground that it was likely to result in loss to the members, and that at best it would involve a membership fee. This last statement was a cunning dodge, and was largely shared in by the bee-keepers present, so that the motion was lost. I then moved that a record of the proceedings of that convention be kept, and that they be published. This motion was carried without opposition, then questioned the convention as to where the money was to come from to defray the expense of publishing the proceedings. At this stage the motion to create a treasury department was about to be renewed, when King again came to the front and stated that he would publish the proceedings free of charge. He published a periodical, the name of which I do not remember, and on the strength of this offer received a number of subscriptions. One year later this new organization (now called the National Bee-Keepers' Association, if memory serves me correctly) met at Indianapolis. This was during the winter of 1872-73. I never attended another meeting of this body until the fall of 1904, at St. Louis, as I moved to Rice Co., Kans., in 1873, and kept no bees from 1873 to 1903.

Mr. Langstroth did not participate very extensively in the discussion of subjects brought before the convention. He was depressed in spirit to quite an extent, owing to the recent death of his son, James Langstroth. Besides, he could not have been very favorably impressed with the motion that was made to collect money from the bee-keepers present for his benefit—that is, if he knew about it.

He was not present when the motion was made. He afterward wrote an article concerning proposed charitable donations for his benefit, that had anything but a friendly tone. He was not at the Cleveland convention—in

fact, I never saw him after the Cincinnati convention, which occurred not very long after the Cleveland convention. He wrote me concerning the loss of his wife, when she died, and during 1872, I think, he wrote me

from Washington, D. C., stating that Mr. Samuel Wagner, then editor of the American Bee Journal, had died that morning of heart disease. This was the last time Mr. Langstroth ever wrote to me. Rice Co., Kans.



Contributed Special Articles

"The Honey-Producers' League," and Why It Should Be Worthy of Our Support

BY J. E. JOHNSON

HAVING sent in my dues some time ago to become a member of The Honey-Producers' League, I would like to offer a few suggestions and criticisms.

The League was organized very suddenly, the bee-keepers not being consulted or even notified, and thereby not being permitted to offer any suggestions or having any say whatever as to who should be the officers, and are asked to contribute their dollars to help advertise honey, but have no voice in the matter of how it should be done. I don't believe the organizers of this League can blame bee-keepers very much if they think as I did when this was first brought to my notice. In fact, it seemed to me that these men did not think the bee-keepers knew enough to do business for themselves, but would contribute their money if they furnished the brains and carried the money-bags. However, I am personally acquainted with Mr. York, Mr. Hutchinson, and Dr. Miller, at least to the extent that I am sure they were doing what seemed to them to be necessary, and I am sure they all have the interests of the bee-keepers at heart. No better men could have been chosen on the Executive Board.

Let me give an account of some experiences I have had in organization.

Five years ago I began trying to organize a farmers' mutual telephone system in this locality. I first began talking it up among neighbors. Oh, yes, it would no doubt be a fine thing, but they would not take one just yet. Some would not be on a line that had any other 'phone on, and each had an idea of his own as to how a line should be constructed, and nearly all differed from each other and from me. I had spent considerable time and study on the telephone question so as to adopt the proper method and be sure to get started right.

Well, I finally appointed a time for meeting, notified all my neighbors, and we met, that is, 10 of us did, but we could not agree on many points, so it was decided to have another meeting, and in the meantime we would all seek for more information and get others to come.

At our next meeting there were only 5 present, and some lived nearly 10 miles apart, so it all fell through, and they gave it up. But I was determined to get the thing started, so I went to a telephone constructor and made an agreement with him to furnish everything except poles, and build the line complete and install 'phones for \$25 each, providing I could get subscribers near enough together so that each subscriber should furnish 16 poles, 60 steps apart, and thus pole the line.

I then went to my neighbors with a contract to that effect, and I guaranteed them that if after having the 'phone 30 days in their houses it proved unsatisfactory, they need not pay a cent.

Well, at first only 6 'phones were installed, but the system has now grown to something over 200 'phones, and we have absolutely free service with something like 25,000 'phones. We now pay only \$2.00 per year at our home switch. Even the large cities are willing and anxious to give us free exchange, as they charge the city people 15 cents when they call us up, so they make money in that way. We just got a letter from the Peoria Independent Telephone Company, and they want to exchange with us, and I don't think any one of us would give up his 'phone for \$100.

Now, I did not do all this myself, but I hit the ball the first real hard lick, and it has been rolling ever since. The organizers of The Honey-Producers' League have hit the

ball a whack in their own way, and it has begun to roll. Let's help it along.

To the bee-keeper with from 20 to 100 colonies, I want to say your dues are not very much, and if you are benefited only a very little you will receive more than you give. And the specialist with 500 to 1000 or more colonies should not hesitate to pay his share pro rata, as he is in a critical period. If we have a big honey crop this year, with prices already very low, and lots of old honey left over, where will you be? It is very much harder to get honey to take a raise in price than it is to let it go down.

We have a bee-keepers' association in this locality called The Western Illinois. It has been growing in membership and interest ever since it was started, and our next meeting will be Sept. 20, at the Court House in Galesburg, Ills. We expect to discuss the honey-selling problem more than any other question at our next meeting. It is our intention to make arrangements to get the merchants to allow us to display our honey to the best advantage in their stores. The daily papers have sent their reporters to our convention each time, and have given a fine report of it, with large head-lines on the first page. They have treated us well, and we intend in turn to treat them well, and shall do some advertising of our home product. We shall wait on the merchants and get them to handle our product first, and if they refuse to do this we shall put a man in the field to canvass our honey from house to house, and sell in case lots in this and other cities, if we have an abundant crop (and indications are quite fair for an abundant crop).

A few years ago there was lots of honey shipped from Chicago to these small cities, but it will be the duty of our association to help sell our own crop first. Many other localities are forming local organizations and will adopt similar plans, perhaps. Thus Chicago and other large cities will not buy nearly so much honey, as it has been customary for Chicago firms to sell honey to many smaller towns in this and adjoining States. If the demand becomes less in the large towns, and the supply of honey should be large in the Western States this year, what will be the result? And I would say to the specialist, as The Honey-Producers' League offers an opportunity where both the specialists and the small bee-keepers can join hands and help each other in this matter, don't neglect your duty, but let us all pull together now, and at once. You with 1000 colonies are asked to contribute \$50. That seems a great deal, but 50 bee-keepers with 20 colonies each, also contribute \$50, and they probably all sell all their honey to neighbors, and near home, while you put nearly all of your honey in competition with others.

To the officers of the League let me say that I have read very carefully the account of your Chicago meeting, and the regulations or by-laws adopted, and as written by Mr. Hutchinson, and, in my judgment, one of the most unwise things in it is that you decided not to advertise until the treasury contained \$5000, although you all admit that work in this line is urgently needed at once. This seems to indicate your lack of confidence in the bee-keepers themselves.

Don't blame the bee-keepers if they think in return that the supply manufacturers expect to make a future raise on supplies in order to get the money back they have contributed. A small raise would more than make it up. That would throw all the expense on the bee-keepers, with the manufacturers carrying the money-bag and using as he or the Executive Board sees fit. The manufacturer contributes one-fifth of 1 percent. The bee-keeper is asked to contribute \$1.00 per 20 colonies, which, counting colonies to be worth \$3.00 apiece, is one percent, or five times the rate of the manufacturer. So, don't hold too tight a grip on that money-bag, but get to work and show the bee-keepers what you can do, and they will give this cause their general support.

Mistake No. 2 is for an organization with a capital of \$5000 or less to offer a \$10,000 reward, or twice as much as they have on hand. That is too much on the *cure-you-right-away* plan. Mr. Hasty's plan, as given in his "Afterthoughts," is certainly a much wiser one, and worthy of consideration.

Mistake No. 3 is to pay big money for a half-page advertisement in the daily newspaper with big letters, as if the people were all deaf. Don't start out too awfully big.

Start moderately, and spend the greater part of the money after you have become accustomed to the harness, so it will be used to the best advantage.

The men who started the League are deserving of praise. We surely must adopt up-to-date methods in finding a market for our product, and I am sure the leaders in the League are safe men to tie to, and if they had not started in their own way probably nothing would ever have been accomplished. They offer to do this work without salary, and I think we should not hesitate to pay our allotted share.

There is a growing antagonism between bee-keepers and bee-supply manufacturers; also between the small bee-keepers and the specialists. This should not be so. And now, as the manufacturers have planked down their money, and invited the bee-keepers and all to join in and aid the cause of the most importance to bee-keepers, let us all meet each other half way. We are all interested in the welfare of the bee-keepers—all rests upon the proceeds of the honey crop.

Probably my criticism has been rather plain and to the point, but it is meant for the good of all.

Knox Co., Ill.



Some Remarks on Wintering Bees

BY HENRY ALLEY

ABOUT this time of the year the bee-keeper can go into the apiary on warm days on a tour of inspection, for the purpose of seeing where mistakes were made in preparing his bees for winter.

A few colonies will be found that have perished from starvation, not because the combs were not filled with stores the previous fall, but because the bees clustered too near one side of the brood-nest, and during a long, cold spell could not reach the food stored in combs at the opposite side of the hive.

Very large colonies are not apt to be caught in such a trap, but the weaker ones, if they happen to cluster in the early winter at either side of the brood-chamber, almost invariably die from this cause. Sometimes the bees select the combs for wintering and clustering upon that contain the least honey. There is but one way to help the bees out when this is likely to happen. Remove the empty combs at the side of the hive, and replace them by inserting full combs—that is, alternate the full and light filled ones so far as they will go. This work, of course, should be done as soon as the bees cease to store fall honey, as it can not be safely done during cold weather.

As soon as the honey-flow is over, bees should be packed for winter, and not disturbed thereafter.

A good way to winter bees is to let them alone from November to April. I mean by this, that under no circumstances should the interior of the hive be disturbed. Hardly anything can be done during cold weather that will in the least be beneficial to the colony, unless it be to carefully clear the entrance of the hive of dead bees.

Now a word about snow around and over the hives. During the winter of 1903-04, here in Massachusetts, we were buried in snow for four months. I spent much time digging the snow away from the hives, especially around the front ends, thinking each time that a warm day would soon come so that the bees could take a cleansing flight, which they seemed much in need of before the winter was half gone. But the warm day did not come—not one favorable day from December to March 20.

The mistake I made that winter cost me the loss of many colonies of bees. During the past winter, instead of digging the snow away from the hives, I spent my time in that direction in covering the entire hive with snow. In doing this I paid no attention to the entrances of the hives, but tried my best to seal them all up as tight as a fruit-jar. When the warm days came, which was Jan. 1 and Feb. 21, I dug the snow away from the fronts of the hives and gave the bees a chance to fly all they desired. Result, bees came through in fine condition.

In the spring of 1904 the best colony I found was in the yard of a man some six miles from my place. This colony was a swarm hived in a shallow hive-cap the previous June, then the box was placed upon two sticks of wood and directly upon the ground. This box of bees was not seen by the owner from November to April 10 the following year, and the hive contained nearly bees enough to swarm.

If a good, big blizzard comes your way, and covers your hives all over, my advice is to let them alone. Colonies in

that condition need no attention, and will surely come out all right when spring opens.

As a matter of fact, a good colony of bees needs but little packing to insure safe wintering. All should use hives having outside or winter-cases, and then the snow can do the bees no injury. Some coarse material, such as burlap, over the frames is about all the protection needed in winter. Upward ventilation without much draft is a great advantage to the bees.

I recently read in the American Bee Journal a good article from the pen of Mr. Latham. I can not agree with him that a large entrance is sure to winter bees. The large entrance is all right, and actually necessary, but many other things are required to insure their safe wintering.

Two years ago I purchased 10 colonies of bees from a woman in a near-by town. When I packed the hives, I remarked to the lady, that, had those bees been in my yard the previous winter they would have died, as I did not see how the bees got out of and into the hives, as the only entrance I saw in at least two of them would admit of only one bee at a time. Yet those 2 hives of bees were in as good condition as any of the 10 colonies.

I took the bees home, and during the summer managed to enlarge the entrances of all the hives. The next winter was the hard one of 1903-04, and notwithstanding the fact that each hive had a large entrance, several of those colonies died; but the loss was not caused by the size of the entrance. It was dysentery, caused by poor food and long confinement.

Bees having poor stores for winter must have frequent flights, or many of them will die.

As a rule, I have found that 100 days, or three months, is about as long as bees, either on the summer stands or in the cellar, can stand confinement here in Massachusetts.

There is within a half mile of my apiary 200 acres of goldenrod. Just so sure as the weather during the month of September is dry, warm, and pleasant, the combs in all my hives will be packed with fall-gathered honey. The quality of such honey is not first-class, certainly not for winter food for the bees. Frequent flights of the bees in winter generally bring my bees through the winter safely. When long confined, say of two months' duration, if entire colonies do not die, the hive is greatly depleted by the bees continually getting out when the sun strikes the hive during the warm part of the day. From this it will be seen the importance of darkening the entrances with snow, or in some way to keep the bees quiet.

A good queen put in not later than Aug. 1, plenty of good honey, the hive well prepared for winter, and absolute quietness, will generally bring a colony safely through to spring.

Essex Co., Mass., March 18.



How Bees Find a Future Home

BY G. M. DOOLITTLE

DO bees select a future home before swarming?" is a question frequently asked. As this has quite a little to do with a start (to many) in the bee-business, it might not be amiss to talk about the matter a little.

My opinion is that where one colony knows where it is to go before it swarms, five know nothing of the kind. The reasons for such an opinion are based on the following:

First, the majority of swarms cluster within 2 to 5 minutes after coming out in the air, and then send out scouts to find a place to go for a home. This is easily proven by allowing a swarm to hang on a limb for 2 or 3 hours. Now take them from that limb or place, hiving them a rod or two away, and you will find from 10 to 50 bees hovering around that limb for from hours to days. I have often seen them about such a limb 3 days after such swarm had been hived, while, if the swarm is hived at once, no bees will be seen hovering about the limb 10 minutes after the swarm has been taken from it.

Next, I have known of swarms hanging on limbs 2 or 3 days at a time till they have built quite a little comb there, and then go off to a tree, or into some old empty hive that had been left standing in some apiary. From my own observation and that of others with whom I have conversed in this matter, five out of every six swarms alight and send out scouts in search of a suitable place for a home. If the scouts fail in finding such a place within 2 or 3 miles of where the swarm is clustered, the swarm moves off from 4 to 10 miles, when they cluster again, and again send out scouts, thus clustering and sending out scouts until a suitable place is found for a home. If a rainy day or two comes

while they are clustered out on a limb, they build some comb; and if the weather is warm, and plenty of honey is found near when it clears up again, they may cease to look farther for a home, making a home of a limb, rearing brood and storing honey, the same as if in a hollow tree, a cleft in the rocks, or a hive; for the cases are by no means isolated where colonies have been found with plenty of combs, brood and honey for wintering, with nothing to shield them from the elements save the twigs and the few leaves above them. A few years ago a friend living in New Jersey sent me a queen taken from a colony which was found in October having combs and honey enough for wintering on the underside of a grape-vine. And she proved a queen above the ordinary value, too, living and doing good work for 2 years after I received her.

But there are colonies which send out scouts to look for a future home before said colonies swarm, as is often proven by swarms going from the hive to such selected home without clustering at all, or staying not more than 10 or 15 minutes after clustering. When but a boy I remember seeing bees searching all up and down the body of large trees, and wondered what they were doing, and later on I saw quite a number going in and out of a hole in a very large tree that stood on the edge of the woods near where we had a field of corn in which I was at work. And this continued for several days, so that I should have thought there was a small swarm in there had it not been that the bees worked through that hole only from about 9 a.m. till 4 p.m. A few days later a swarm came from one of the few hives which my father kept at that time, and went straight to this tree without clustering at all.

About this time a person about 4 miles from me purchased some Italian bees, the first that had come into this part of the country, and, being interested in the same, I often went to see them. One day, on going to see him, he told me that at an out-apiary which he was working, which contained only black bees, he had noticed in the forenoon Italian bees at work cleaning out an old hive which was left there by the person of whom he bought the bees, the same having some empty comb in it. As this was something new to him, he seemed considerably excited over the matter, and said he should keep watch and see what became of it. I was also much interested and told him what I had seen, as related above.

The next time I went to see him he told me that the bees which he saw cleaning the hive were his own, as a few days later a swarm came from one of his Italian colonies, and, after circling around a few times, they started off in the direction of this out-apiary. Having a fleet horse near at hand, and being a fearless rider, he jumped upon it, and in a moment was going at railroad speed for his out-apiary, arriving there in time to see his swarm rushing pell-mell into the hive that the bees had been cleaning out. As he kept the wings of all his queens clipped, he knew that he could soon tell for a certainty whether these were his bees or not, although he had no reason to doubt that they were; for if they were, he had their queen at home in a cage, and sooner or later they must return to her unless they had come across some queen in their flight. In about half an hour they became uneasy and began to leave the hive, seeing which, he returned home only to find them coming back and running into the hive from which they went, and clustering about the cage containing the queen which he had left at the entrance of the old hive. Wishing to see more of the matter he liberated the queen, allowing her to return back with the bees. The next day they swarmed again, and again went to this hive at the out-apiary, the same as before. This they kept up for 4 or 5 days, the bees going to that hive which they had cleaned out, without clustering at all, each time they swarmed. After he became satisfied that colonies did select a home before they left their old home, and becoming tired of having them swarm so much, he divided the colony, thus putting a stop to their swarming.

A neighbor to whom he told this circumstance, took advantage of it by way of procuring some hives and a few frames of empty comb, which he placed in these hives and put them in trees and out-of-the-way places, till he soon had an apiary of his own, without even so much as hiving a single swarm.

Bees seem more inclined to go into places where there is a little comb than into places with no comb; but where comb is left in hives for such purposes, said comb must be free from pollen and spread well apart, or the moth will lay eggs in them, and they be eaten up with worms unless the bees happen to take possession of them before the larvae of the wax moth do.

Onondaga Co., N. Y.

Our Bee-Keeping Sisters

Conducted by EMMA M. WILSON, Marengo, Ill.

Unreliable Bee-Information

A good friend in Michigan sends a clipping from that excellent periodical, The Epworth Herald, which emphasizes anew the fact that it is not a safe thing for any other than a bee-papist to publish matter about bees without first submitting it to some practical bee-keeper. The article is styled, "Safeguarding the Queen," is reliable in the main, and written in an interesting manner, but some of the items would hardly be endorsed in their entirety by a two-thirds vote of the sisters. For example:

"Indeed, it is practically impossible for an intruder to enter a strange hive without discovery. And discovery means instant death and dismemberment."

And yet thousands of bees, upon returning from the fields, have entered wrong hives and received a kindly welcome. Did any of the sisters ever observe a case of "dismemberment," as mentioned?

"These honey-gatherers are not permitted to feed the queen direct. When they enter a hive they must give a mouthful to two drones waiting on guard. If the sample proves satisfactory the bees carry the nectar to the storeroom, where it is mixed with what the other workers have gathered. When the hive-cells are full, the workers and drones sample the mixture again, and then seal up the cells."

That leaves us all jagged for fuller informa-

tion. During the weeks when no drones are in the hive, what is done with the mouthful that should be given to the "two drones waiting on guard?" What weapons of offense or defense do those "two drones waiting on guard" use? "If the sample proves satisfactory the bees carry the nectar to the storeroom," but if the "two drones" do not O. K. it, what is done with it? Is there not danger that the "two drones" will be overworked when the workers are pouring into the hive with their loads at the rate of a hundred or more in a minute? When the cells are full, and the mixture is sampled again, do the same "two drones" do the second sampling?

Other questions may be asked when the foregoing are answered.

An Austrian Sister "Skirts" Bees

The following account of what one of the sisters did in Austria is from the American Bee-Keeper:

"Jungklaus also tells how a young woman captured a swarm of bees. Being on a tramp, she found a swarm of bees hanging on a bush. Wishing to secure it, she took off one of her skirts, tied up one end, and, by the help of sticks, spread it out in such a way that she could hive the swarm into it. After the bees had all moved in, she tied up the other end of the skirt and thus carried the swarm several miles to her home. ('Well done.')

We have twice had a somewhat similar experience. Once on our way to the Hastings apiary—which is about 5 miles distant—when about half way there we were offered by one of the neighbors a small swarm of bees which hung on a willow-tree by the roadside. Dr. Miller thought it would not pay to bother with them, as we had no way of carrying them, when I suggested my bee-hat—a broad brimmed straw-hat with a veil sewed around the outer brim, having a rubber cord run in the lower edge. He rather thought it might work, and as the bees were hanging on a convenient lower limb, we commenced operations at once.

Dr. Miller trimmed everything down as close to the swarm as possible, then carefully cut off the limb with the swarm, and while I held the hat upside down and stretched the rubber cord as much as possible, he slipped the swarm inside, while the veil was secured about the limb above the swarm, and we started on our way once more, I carrying the swarm by the end of the limb. When we reached the apiary we got a hive full of empty combs ready and let the bees run in, and I once more had possession of my hat.

Once later, when we had occasion to hive a small swarm at some distance from the Wilson apiary, we used the hat again in preference to carrying a hive that distance.

Wintering Bees—Good Prospects

I want to report on my good luck in wintering the bees last winter, as it was very cold. I was away from home last fall when I ought to have been packing my bees, so I left them on the summer stands. The stands are from 8 to 24 inches from the ground. I lost 3 colonies out of 21, so I now have 18, all in good condition. The 3 that died were late swarms, and they did not store honey enough to feed them. We did not have a very good honey crop last season. A hail-storm ruined the

first crop of alfalfa. I got 500 pounds of comb honey, and increased from 14 to 21 colonies. We have a good prospect for the

season, if all goes right. Success to all bee-keepers. MRS. BEN FERGUSON.
Ford Co., Kans., May 8.

Mr. Hasty's Afterthoughts

The "Old Reliable" seen through New and Unreliable Glasses.
By E. E. HASTY, Sta. B. Rural, Toledo, Ohio.

AMOUNT OF CAPPED SECTION-COMB SURFACE.

Some of our expert answers to questions are a little depressing to the apicultural student by the amount of disagreement in opinion which they show. The student aforesaid may be reassured by the answers to question 25. Out of 29 respondents 22 either say the whole surface of a section should be sealed, or all except the cells next the wood. None of the other respondents lean in any other direction very strongly. One answer would tolerate 15 percent unsealed in second-class honey; another would allow 5 percent in first-class; and that's about the extreme in that direction. Page 293.

CHEAP SECTIONS—FOUL BROOD.

"Lickin' good, Sal, why don't you get you some?"—as the bumpkin remarked to his girl about the stick of candy he purchased. Greiner's worse than that. Sal could, and probably did, buy the stick of candy; but we can't buy a nice supply of two-dollar sections to be kept as an emergency reserve.

Sure enough! If our appointed eradicators of foul brood at times become distributors of foul brood, and carry it into territory previously unpolluted, it surely becomes us to "look a little out." Page 294.

A CORRECTION ABOUT PROF. HARRISON.

Lumber and literature both liable to "nots!" In the former always detrimental; in the latter often beneficial. Vide the not that turned up missing in the first line of my third caption, page 296. Also, when the knots of lumber drop out they always leave a hole to tell the tale; but no hole is left to hint that Prof. Harrison is *not* the objectionable bee-doctor he is there alleged to be.

NOTICING "STRANGE" BEES.

The phrase, "I have noticed strange bees," seems to suggest that a less careful observer might have failed to notice them. That would hardly be the case with an onslaught of robbers. The peculiar language made me wonder a little if "Illinois" was not mistaken about what he saw. Possible to mistake extra-faithful guards for robbers. Sometimes guards galore get well out on the alighting-board, running at every bee that alights, saying, "Halt, there, and give the countersign." And the bee thus rudely collared says,

"I haven't the last countersign with me; but here's something just as good;" and thereupon uncorks something from the inside pocket. Page 297.

DAUGHTERS OF BEST QUEENS AND OTHERS.

The fact Dr. Miller alludes to on page 297, is one of the most trying ones with which we have to deal. Left entirely to herself, the best queen in the apiary will die and leave but one daughter; while the most undesirable one of all will leave a host of daughters. If it wasn't for this one ugly fact one might almost object to breeding queens, and advocate systematic letting alone.

WEAK NUCLEUS BUILDING WORKER-COMB.

"Curis!" Curious how much we don't know—some of us. Dr. Miller says, on page 313, that a queenless nucleus will build worker-comb if weak enough. I wonder greatly *why* extreme weakness should make such a change—in a rather mysterious thing. In my journeys through the forests of Ignorance, I don't think I ever encountered that little fact before. Thanks, Dr. Miller!

PREPARING FOR SWARMS THAT DIDN'T COME.

So E. Tucker made lots of hives to be prepared for the excessive swarming of his Carniolans—and not a swarm for two years. I suppose that that quaint proverb, "The unexpected always happens," applies a little more frequently to bee-keeping than to almost any other vocation. Page 317.

ADVERTISING HONEY IN CANADA.

The great publications of the United States have many readers in Canada, I believe, while Canadian publications circulate but little here. It follows that when honey comes to be advertised heavily the Canadians will have "a soft thing of it;" can just do nothing, and in so doing get a good share of the results. And if they choose to organize and put some ads. in their own papers, it will come in as additional and cumulative, and count much more than the same would if put in just now. They're all right anyhow. And also our folks were right in not trying to run two nations in the same advertising League. Otherwise they would have speedily heard that the Canadian [newspaper] widows were neglected in the daily ministrations. Page 323.

Doctor Miller's Question-Box

Send Questions either to the office of the American Bee Journal,
or to DR. C. C. MILLER, Marengo, Ill.

Dr. Miller does not answer Questions by mail.

Starters—Fastening Foundation—Painting Bottom-Boards

1. In Bulletin No. 133, Department of Agriculture, telling about the value of foundation in comb-building, only one end of the starters is fastened to the sides of the section. Is this best, or should it come against both ends? I bought some super foundation the other day that measured $14\frac{1}{4} \times 3\frac{3}{4}$ inches, and as I use $4\frac{1}{4} \times 4\frac{1}{4}$ plain sections, it will not nearly make 4 starters, the width of the section.

2. How does the Parker foundation fastener fasten one-inch starters to sections, that is,

are they held by wax or simply pressed against the sides?

3. Is it best to paint the bottom-board all over, or only that part which the bees do not come in contact with?

4. Does it not need anything to keep supers and covers from blowing off of dovetailed hives? MISSOURI.

ANSWERS.—1. If a single starter is put in a section, it must be fastened only at the top. If fastened only at the bottom, the foundation is likely to sag enough to make it bulge out to one side. Your foundation, when cut in four pieces, will leave a space of about half an inch at the bottom. The result will not be

much different if the space were only half as much. But the better plan is to have a $\frac{3}{4}$ -inch starter at the bottom.

2. Simply pressed hard into the wood.

3. Usually only the outside part is painted. It would do no harm to paint all, but the bees are likely to paint their part well enough.

4. In the early spring, when bee-glue is hard, if the hives are in a windy place, it is well to have a small stone on the cover, unless the cover is otherwise fastened. At other times there is no need.

Rearing Queens—Keeping Italians Pure

1. When I want to rear queens, and I put the prepared cells into Titoff cages, do I put the cages into a queenless colony, or is it all right to put them in the upper story of a queen-right colony?

2. After the queens are hatched out is it all right to leave the queens in the cages in the queen-right colony until needed?

3. How am I to keep my Italian bees pure? Suppose I have two Italian colonies, and the queens I rear from one colony are to be mated. Do I have to take the virgin queen some distance away, and the drones of the other Italian colony with her, to be sure she is mated with an Italian drone? Please describe how I am to arrange the matter so as to be sure of pure mating. ONTARIO.

ANSWERS.—1. They are more sure of proper attention in a queenless colony.

2. No, before they are needed for use they must be kept where they are free to fly out to meet the drones.

3. You may as well make up your mind first as last that under ordinary conditions you can not be sure of keeping pure blood. Some claim success by confining the queens and drones during the hours of the day when drones fly, and then by feeding to induce flight at a later hour in the day. You can succeed without question if you have your queen beyond the flight of any but the desired drones; but that means, according to some good authorities, that they must be 4 or 5 miles away from other bees.

Indian Turnip

On page 312, there is a recipe for a cough cure by W. T. Mundy. What is Indian turnip? May be it is those roots we call Indian potatoes, the stalks of which grow up to a height of 3 to 4 feet, with yellow flowers on top. MINNESOTA.

ANSWER.—No, it doesn't grow 3 to 4 feet high; it is less than a foot high. It is a 3-leaved affair, and the blossom and fruit have over them a hood which gives the plant its other common name, jack-in-the-pulpit. The botanical name is *Arisaema triphyllum*. If you bite a little piece of the bulb or root, it doesn't seem just at first to have a very strong taste, but after a second or two it begins to bite and burn your mouth, and keeps it up in quite a painful manner.

Wintering Bees—10-Frame Langstroth Hives—Shaken or Driven Swarms

1. I am greatly interested in using the 10-frame Ideal super as a hive-body for swarms. Do you think I could winter a colony in one of these 10-frame supers in this locality?

2. Would the 10-frame super full of honey (if I used one super) be enough for them to winter on, or ought I to leave enough empty combs for them to cluster on?

3. I have 10-frame Langstroth hives. Do you think I would do better with them in this locality? There has been a very poor honey-flow in the last 4 years.

4. I made a second drive of newly-hatched bees last season, 19 days after making the shaken swarm. After all of the bees in the second drive had entered I placed an entrance queen-excluder to control drones. The next morning I found nearly all of the bees dead,

and almost completely clogging up the entrance. Do you think this second drive is a success generally? **MAINE.**

ANSWERS.—1. Two ought to winter well, and possibly one might.

2. The one story of frames filled with honey would be enough, but a second story, or something in place of it, must be under to give the bees room to cluster. I am not entirely sure about it, but I think an empty super would do without any combs in it.

3. You can try the change on a small scale, making a comparison of the two side by side.

4. So far as reported, second drives are usually successful. Your experience hardly has anything to do with the success or failure of the second drive. The death of nearly all the colony would seem to have been due to suffocation on account of the entrance having been too much closed, and it might have been the same if there had been no drive.

Preventing Leaky Hive-Covers

We find it very difficult to keep our hive-covers in a condition so that they will not leak. If you know of any paint, or other preparation which we can use to prevent the leakage in question, please give directions for its preparation. **MICHIGAN.**

ANSWER.—It is a very difficult thing to make a cover water-proof with any kind of paint if there are joints or cracks in the cover. The better way is to cover the wood with something that will not leak. Some of my covers are covered with a paper and the paper painted; another lot is covered with tin and painted; and what perhaps is the best, another lot is covered with zinc, unpainted. How long the last will do without paint I don't know.

Putting on Supers—Feeding Bees—Queens Humming

1. When shall I put on the first supers? The colonies have much brood now.

2. What time will the bees swarm this month, when the brood is as much in my hives as I mentioned above?

3. I am still feeding them equal parts of sugar-water, and they take it all. Is this right?

4. What makes the queens hum so loudly for about 5 minutes at a time, then rest a little while, and begin again? **WISCONSIN.**

ANSWERS.—1. When you see bits of very white wax plastered on the top-bars or upper part of the combs. Or, as you are in a white clover region, watch sharply for the very first white-clover blossom that puts in an appearance, and put on supers a week or so later.

2. I don't know; and your telling me that they have "much brood now" does not help very much to decide. But it is not at all improbable that they will not swarm at all in May, the month in which your questions are written. You can only tell anything in advance about their swarming by looking in the hives and seeing when queen-cells are started.

3. It will probably do no harm, but it ought not to be necessary to feed when fruit is in bloom.

4. I don't know; I never before heard of anything of the kind.

Strengthening a Weak Colony

How would it do to set a weak colony of bees in the place of a strong colony, so that the worker-bees of the strong colony would go into the hive of the weak colony, thereby strengthening the weak colony?

CALIFORNIA.

ANSWER.—The plan is hardly advisable on account of danger to the queen from the entrance of strange bees. A safer way is to take a frame of brood with adhering bees from the strong colony and give it to the weak. I have given hundreds of frames of brood in that way without injury to the queen. An entirely safe plan, and one that

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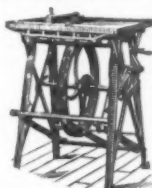
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is very little trouble, is to exchange a frame of sealed brood for one containing unsealed brood and eggs, of course taking the mature brood from the strong and giving to the weak.

Separators—T Supers

1. Do you use separators between two bee-way sections, and if you do, what kind of separators?

2. Are you still using the old T super? I am using 4¼x4¼x1½ two-bee-way sections, with top and bottom starter, without separators. This is my second year of bee-keeping. **ILLINOIS.**

ANSWERS.—1. I use loose wooden separators one-sixteenth inch thick.

2. I am still using the T super, after having tried others. For home use you need no separators. If you pack in shipping-cases, you will need them. Even in the home groceries, unless you use separators, you will find the grocers, in handling, will break the cappings more or less.

Sulphur for Mice in Cellars

Will sulphur hurt the bees if I sprinkle it in the cellar in the winter to keep mice out? **MINNESOTA.**

ANSWER.—Not a bit.

Prevention of Swarming—Queenless Colony—Increase—Transferring

1. I am a beginner, and have 8 strong colonies in good hives. I have timber work, to which I am afraid I will be obliged to give my attention the last of this month and all of next. I don't know how to manage the bees to keep them from swarming during the day, as I leave early in the morning and get in about 8 or 9 o'clock at night. I furnish timber for a coal-mine which is shut down now, but there is talk of starting it up again, and if this is done I can not watch my bees. Should I neglect the timber I would lose more than the bees are worth. How can I keep them from swarming and getting away from me?

2. This spring I had a colony in a box-hive which I transferred to a frame hive. I found they had no queen, but a little brood all sealed, and two queen-cells. This was about the first of April. The queens hatched but disappeared. The bees worked all the time bringing in pollen, but tried to build cells or cups for queens. I let them go until about the middle of April, then gave them a frame of brood from another hive. They took care of the young bees from the eggs up to the bees, but made no attempt to build queen-cells. I tried another frame of brood and eggs. After a week I took a peep and hardly knew the frame, as it was an empty frame to start with, in each end of which I had fastened two pieces of comb. I then gave it a strong colony which patched it up and built it about half way down. The queen followed up closely, and seemed to lay eggs in the cells as fast as they were built. They had had it only about 3 weeks, and had it full of brood and eggs. I gave the frame to the queenless colony (as before stated), and after about a week I took a peep, and to my surprise found it built nearly to the bottom, the brood nearly all out except a patch which was eggs when I put them in, but no cells started. I gave them another frame of brood and eggs and left it 3 days, then took a peep, and just as I expected, no cells were started. I think I could have the patience of Job if it were necessary, but I thought I had fooled long enough, and so put the frames back in the other hives. Then I took the bottom off and set them on another hive, aiming to unite them. I had tried them with 3 frames, one of brood and two of comb on each side to one side of the hive, and had tried them with 4 and 5 with the same result. Why did not these bees try to rear themselves a queen?

3. I wish to have as many colonies as possible to start with next spring. I have thought of starting a number of nuclei, taking brood from old hives and building them

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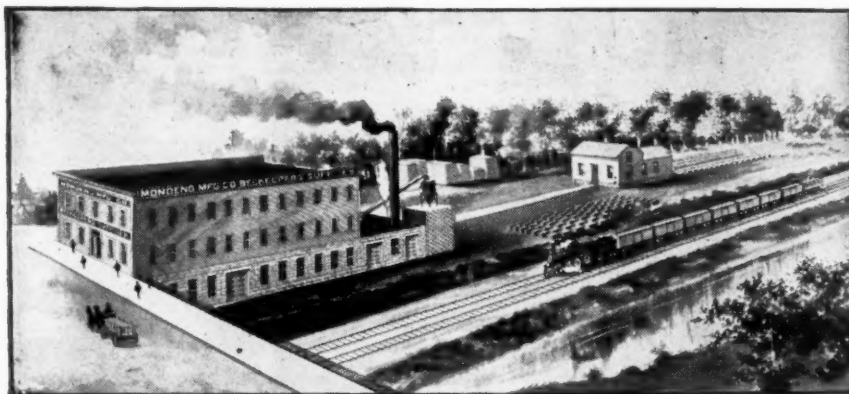
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up gradually as they grow in strength, to take care of the brood, and I have thought of going through them each week to look for queen-cells, and when I find them I will suppose they are getting ready to swarm. Then I shall divide them, giving one colony the cells and the other the queen. And I have thought of clipping the queens' wings so they can not fly.

4. Neighbor No. 1 had neighbor No. 2 transfer a colony about the last of May from a log hive into a frame hive with a comb where other bees had died from starvation, but he did not transfer the brood. The bees left the hive, and No. 2 says the bees won't stay without their brood. Is he right? ILLINOIS.

ANSWERS.—1. One way is to have queen-traps on your hives, so the queen will be caught when the bees swarm, and then you can shake the bees on frames of foundation. Another way is to go through your colonies every 8 or 10 days, and shake the swarm when you find queen-cells started. You may shorten the labor by shaking the whole 8 colonies as soon as one or two start queen-cells.

2. I don't know. I only know that sometimes bees refuse to start queen-cells, especially those that have been queenless a long time. When a colony is queenless early in the season, it is generally better to break it up than to try to have it rear a queen. If it does succeed in rearing a queen she is very likely to be worthless.

3. It is all right to clip your laying queens (of course not virgin queens), for then if a colony attempts to go off you can lose only the queen, and not both queen and bees. You can probably make your plan work all right. Here's another way, one which will give you increase and save watching for swarms: As soon as the first colony starts queen-cells, go to each colony, take away its queen with two frames of brood and adhering bees, being sure there is some honey in the frames, and put in an empty hive on a new stand. A week later take the old hive off its stand, and put in its place the hive with the queen. Then divide the old colony in two, and put each half on a new stand (one of them may be put on the stand from which you have just taken the queen), being sure that each half has a good queen-cell. If queen-cells are started in any colonies before the queen is taken away, then you must make the division sooner, or there may be danger that a swarm will go off with a young queen.

4. A colony transferred without brood is more likely to desert than one with brood. If he transferred the bees into the hive, and then set the hive just where the log-hive had been, the bees would stay ever so much better than if he set the new hive in a new place.

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EITHER GOLDEN OR HONEY QUEENS

Our Golden will come up to any other Golden Strain. Our Honey Queens are what some term "Red Clover Queens." We always call them Honey Queens.

Before July 1.			
Untested	\$1.00	\$ 5.00	\$ 9.00
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2-frame Nucleus (no Queen) ..	2.50	14.00	25.00

When Queens are wanted with Nuclei add price of any Queen wanted. We guarantee safe arrival of all Queens and Nuclei. Our breeders may be returned after 30 days, if satisfaction is not given. Cash must come with all orders. Orders are booked and filled in rotation. We book orders for next season. Safe arrival guaranteed of all stock. We ask a trial order.

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Reports and Experiences

Bees Doing Well

My bees did poorly last season, but have done well so far this year. They began swarming in fruit-bloom. White clover is very thick on the ground. S. G. KILGORE.
Madison Co., Ohio.

Selling Light-Weight Sections

The question of light-weight sections has many sides. Some grocers about here much prefer to buy comb honey in the case by weight. Where the sections hold but 13 or 14 ounces they of course sell these same sections by the section. In this State to-day grocers buy No. 1 white clover comb honey, delivered, at 17 cents per pound by the case, and sell by the section at 18 cents. The most of their profit comes from the 3 ounces short weight of each section sold. Last fall they bought the same honey at the same price, and sold it for 20 cents or 21 cents per section, thus making a very good thing of it for themselves.
HERBERT W. DENIO.
Hampden Co., Mass., May 8.

A Beginner's Outlook

I have just started in bee-keeping, and have 35 colonies. I have the native bees crossed with Italians. I have one colony that is extra good. They resemble the blacks, except that they are longer and are shaped more like a queen. What kind of bees are they, and what are their value? There are hybrids in the same hive. They work better than any bees I have seen, coming in heavily loaded and they don't seem to want to swarm, but are busy storing honey. I have given them an entrance $\frac{3}{4}$ x 12 inches, but they crowd that space in going in and out. They are in an old-fashioned box-hive. Christmas week it weighed 106 pounds, the hive itself weighing perhaps 25 or 30 pounds. I have placed this old hive on top of a new one, and let them pass through the new one to go up into the old one. I think I can get them in a new hive in this way without much trouble.

I have just sold some comb honey to a lady whose home is in Birmingham, Ala. She said she could not buy honey there, as what was sold for it did not taste like honey, and the comb seemed to be a good substitute for chewing-gum, so she had to taste of my honey before buying it. She intends to ship some to her children at Birmingham. She said she was glad of the opportunity to purchase comb honey made by the little bees.

D. R. PHILLIPS.

Jackson Co., Ga., May 16.

Dovetailed Hive—Making One's Own Supplies

In reference to the talk between "A Reader" and Dr. Miller, page 329, I believe Dr. Miller should have said the "Langstroth hive" instead of the "dovetailed hive." He says that custom makes the name "dovetailed hive" apply only to hives containing frames $17\frac{1}{2}$ x $9\frac{1}{2}$, and that any other understanding of the word "dovetailed hive" would throw out of gear the catalogs and bee-literature in general. According to this we have no "Langstroth hive," the nearest approach to it being a dovetailed hive having the Langstroth dimensions. If the catalogs and bee-literature are at fault, they should right themselves. The name "Langstroth hive" rightfully belongs to the common single-walled hives containing frames $17\frac{1}{2}$ x $9\frac{1}{2}$, whether the corners are dovetailed, halved, or otherwise. It should be the pride of every bee-keeper to perpetuate the memory of Father Langstroth. How can we do this better than to have a hive bearing his name?
For my part I want a real "Langstroth hive"—a dovetailed or any other tailed hive

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Untested, 75 cents each; \$4 for 6; or \$7.50 per dozen. Tested, \$1.25 each. Breeders, \$3.

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Absolute satisfaction or no deal. We breed 6 pure races. Price-list describing them free.

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THE BEE AND HONEY COMPANY, Beeville, Bee Co., Texas.

VIRGINIA QUEENS Italian Queens secured by a cross, and years of careful selection from red-clover queens and superior stock obtained from W. Z. Hutchinson. Untested queens, 75c; after June 15, 60c; tested queens, \$1.00; after June 15, 75c; selected tested queens, \$1.25; after June 15, \$1.00. Write postal card for circular. CHAS. KOEPPEN.
17A26t
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Important to You

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Is the fact that, after 20 years in the SUPPLY BUSINESS, the last year shows an increase of 33 percent over any previous year.

Is there any better proof than this, that we satisfy and please our customers?

We have the facilities, the experience, and just the kind of goods you want.

They are the ROOT GOODS, and we sell them at Des Moines at Factory Prices.

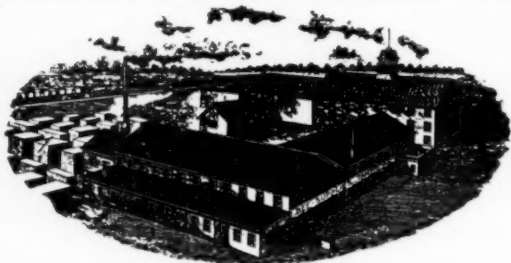
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J. G. Goodner, of this State, writes me that he "prefers to pay \$25 for a Rietsche Press than do without it."—A. G.

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13A1f

NORRIS & ANSPACH, Kenton, Ohio.

does not satisfy me so far as the name is concerned. In short, let us not call it the "dove-tailed hive," but the "Langstroth hive."

Mr. E. E. Hasty's article on the bee-supply manufacturers' trust, page 248, is a stroke straight from the shoulder, and it struck the key-note. That there is such a trust most bee-keepers know, and we should speak and write of it in such a plain way that the trust may know that we know it. "Actions speak louder than words." Let those that can and have the time, make their own hives, frames, etc. This can be done in winter and on rainy days, when there is but little else to do.

I started in bee-keeping in 1900, by buying one colony of Italians in a box-hive. With the exception of that box-hive I have never owned a hive or a frame that I did not make. I use the 8-frame Langstroth. I have two small circular saws—one for cutting off and one for ripping or cutting lengthwise. They are run by hand-crank power. The hives I make are halved cornered. The frames have the double saw-kerf. With this outfit it is easy to make hives, frames, covers, bottom-boards, hive-stands, supers, section-holders, shipping-cases, etc. In fact everything needed except sections and separators. I am well-informed on the prices of bee-supplies, and I save money by making my own hives, etc.

L. V. RICKETTS.

Whitman Co., Wash.

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Bees wintered poorly here last winter, my neighbors losing from one-half to all of theirs. I packed mine carefully last fall, and saved 38 of the 45 colonies that I packed in winter quarters. What colonies I saved were strong, all had plenty of honey, and have built up so that they will be in good condition for the honey-flow when it comes.

I had a fair crop of honey last year, 38 colonies giving me 2200 pounds of honey and in-

THE ELGIN HIVE

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Original
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\$1.50 \$1.10 \$1.00 90c 65c—per mail.

Sent on receipt of price per mail.

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OTISVILLE, PA., Jan. 18, 1904.

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He will furnish at same prices as last year: Tested, \$1; Untested, 75c; 5 for \$3.25; 10 for \$6; 15 for \$8.25; 25 for \$12.50; 100 for \$45. He breeds Goldens, Carniolans and 3-Band Italians. Also 1, 2, and 3 frame Nuclei, and full colonies. Prices given on application. Pharr pays the freight, and guarantees satisfaction on all Queens. To do justice and judgment is more acceptable with the Lord than sacrifice. —(Prov. 3: 21.) 6Atf

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Do You Need Queens? By Return Mail?

If so, we can fill your order with the best Queens that money can buy. Try our strain of 3-band Italians; they will not disappoint you with empty supers. Untested Queens, 75 cents; \$8 per doz. Tested Queens, 1 each. Send for circular. J. W. K. SHAW & CO. 13Atf LOREAUVILLE, Iberia Par., La.
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creasing to 46 colonies, but then I am the only bee-keeper in this neighborhood who takes any bee-papers or buys any bee-books. D. E. ANDREWS.

Monroe Co., Ind., May 5.

Great Honey-Flow in California

We are having the ideal conditions for a great honey-flow here at the present time. I know a man who has kept a colony of bees on the scales for years, and has the record this year. He secured 22 pounds one day last week, and 24 pounds the next day. We have had some very warm days, and the bees have been wild with their opportunity to work and store. I have never seen the like of bloom that now decks our fields, canyons and hills. The black or ball sage is in bloom and the white is just beginning to open. Both of these incomparable honey-plants give rich promise of a great yield of honey this year. The plants show a growth and vigor that only our abundant rains will explain.

The salvias also are out in force, and are very attractive to the bees. One of these, *Salvia carduacea*, is a wonderfully beautiful plant, and I have wondered that it is not in cultivation, the world over, for ornament. It has a ball of exquisitely beautiful lavender flowers, and the stem passes through this, and then there is another ball of the bloom, and so on there may be five in extreme cases. The foliage is woolly, and the flowers are as fine as any sage bloom that I have ever seen. The foliage looks like that of the thistle, and hence the scientific name which means "thistle *Salvia*."

We have another *Salvia* of like habit, which is far more common, *Salvia columbaria*, and though not as showy as the other, it is a good bee-plant and helps the bee-keeper not a little.

We also have many phacelias, all of which attract the bees and add to the stores in the hives. I have wondered if we might not plant more of the winter blooming acacias, and eucalypts, so as to give more winter work for the bees, and thus have brood-rearing com-

— ITALIAN — Bees, Queens and Nuclei



Choice home-bred and imported stock. All queens reared in full colonies.

One untested queen.....	\$.90
One tested queen.....	1.10
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All grades ready to send by return mail.

Safe arrival guaranteed. For prices on quantities and description of each grade of Queens, send for free price-list. J. L. STRONG, 204 East Logan Street CLARINDA IOWA. 14Atf Please mention the Bee Journal.

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For a limited time we offer No. 25 Honey-Jars, porcelain cover, metal screw cap, holding one pound of honey net, one gross in case complete in 5-gross lots, \$4.00 per gross; less quantities, \$4.50 per gross, f.o.b. New York. If you want to secure some, let us know at once.

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Best and most direct Shipping Point
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We have on hand a large stock of

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Consisting of Hives, Sections, Shipping-Cases—
everything used by the practical, up-to-date bee-
keeper.

Catalog and prices on Honey on application.
If you want Good Goods at Factory Prices and
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The MONETTE Queen-Clipping Device is a fine thing for use in catching and clipping Queens' wings. It is used by many bee-keepers. Full printed directions sent with each one. We mail it for 25 cents; or will send it FREE as a premium for sending us One New subscriber to the Bee Journal for a year at \$1.00; or for \$1.10 we will mail the Bee Journal one year and the Clipping Device. Address,

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Queens from Root's Red Clover Stock and Golden Italian Queens, the best honey-gatherers in America. Untested, 50c each, or \$6.00 per dozen. I guarantee safe delivery. Send your orders to

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Try Taylor's 3-banded leather-colored and 5-banded Golden Queens—the best honey-gatherers in America. Untested, 75c each, or \$8 per dozen; tested, \$1, or \$10 per dozen; select tested, \$1.50 each; breeders, the best, \$3 each. I have been breeding queens for 17 years, and I know what a good queen is. No small queens sent out. I guarantee safe delivery. Send your orders to

J. W. TAYLOR, Ozan, Ark.
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Golden Queens and Bees

Ready June 1. Hustlers for honey; very gentle, non-swarming. Price-list now ready—also an 8-page leaflet on queen-rearing, including my experience in curing pickled brood, black brood and bee-paralysis, sent free to all who apply.

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A Standard-Bred Italian Queen-Bee Free!

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As has been our custom heretofore we offer to mail a fine, Untested Italian Queen to the person who complies with the following conditions, all of which must be strictly followed:

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2. Sending your own name with the \$1.00 for the Bee Journal will not entitle you to a Queen as a premium. The sender must be already a paid-in-advance subscriber as above, and the new subscriber must be a NEW subscriber; which means, further, that the new subscriber has never had the Bee Journal regularly, or at least not for a whole year previous to his name being sent in as a

new one; and, also, the new subscriber must not be a member of the same family where the Bee Journal is already being taken.

We think we have made the foregoing sufficiently plain so that no error need be made. Our Premium Queens are too valuable to throw away—they must be earned in a legitimate way. They are worth working for.

We will book the orders as they come in and the Queens will be mailed.

Will you have one or more?

If you cannot get a new subscriber, and want one of these Queens, we will send the American Bee Journal a year and the Queen—both for only \$1.50. Address,

GEORGE W. YORK & CO.,

CHICAGO, ILL.

mence so early that the bees would be strong for the orange bloom. There can be no question but that the citrus bloom is rich with nectar, else it would not fill the entire atmosphere with such delightful perfume. I have not any doubt but the honey from this source would be of the very best flavor. This year not a little has been gathered. I believe that more attention to this winter bloom might be wisely given. The reason that we have it is that we bring Australian trees here, and as they home at bloom in our winter, they continue the habit after they are brought here. Our genial winters make the trees slow to change the date of blooming. A. J. COOK,
Los Angeles Co., Calif., May 18.

Bees Wintered Well

My bees were taken out of the cellar about 3 weeks ago, and I was very well pleased with the way they wintered. I put away 36 colonies and took out 35 in fine condition, the one that was dead (I find by referring to my record) being queenless last fall.

The colony in which I put a queen, secured last fall, stored 30 pounds of comb honey after that, and it is good and strong now. She is a fine one. Wm. H. Root.

Wayne Co., Nebr., May 2.

Ideal Spring for the Bees

This has been an ideal spring for the bees. Since fruit-trees began to bloom there has not been a day but that the bees could work. They seem to have plenty of brood, but are not very strong in supplies, so that I will let them clean up a lot of second-class sections.

I am starting in with a spring count of 25 colonies. S. C. REARICK.

Wood Co., Ohio, May 9.

Langstroth on the Honey-Bee

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At Root's Factory Prices

Honey and Beeswax

CHICAGO, May 8.—With April about all the trade in comb honey ceases so far as this market is concerned; occasionally a case sells, but no lots, so that prices now are practically without change, pending the new crop. Extracted is exceedingly slow of sale; white ranges from 5½¢@7¢, and amber 5½¢@6¢, according to flavor, quality and package. Beeswax in active demand at 30¢.

R. A. BURNETT & Co.

CINCINNATI, May 8.—The demand for honey has increased quite a bit since our last quotation, which is due, probably, to the concessions made in prices to affect sales, as well as the awakening of the spring trade. We quote amber extracted honey in barrels at 4¼¢@6¼¢, according to quality. White clover and fancy extracted honey at 6¢@7¼¢. Comb honey has seen its season. Beeswax 29¢ cash.

THE FRED W. MUTH CO.

BOSTON, May 23.—Our honey market continues very dull, with very little movement to be noted. We quote fancy white at 14¢; No. 1, 12¼¢@13¢. Extracted, from 6¢@8¢, according to quality.

BLAKE, SCOTT & LEE.

PHILADELPHIA, May 19.—The season is about over for the sale of comb honey, with so few sales that the market is not established enough to quote price. Extracted honey has met with some demand, and we quote as follows: White, 6¢@7¢; amber, 5½¢@6¢. Beeswax, 28¢.

We are producers of honey and do not handle on commission.

WM. A. SELSER.

NEW YORK, April 19.—There is no change in the condition of the honey market. Very little comb honey selling and prices ruling about the same as our last quotations. Extracted in fair demand only. Beeswax firm at 30¢.

HILDRETH & SEGELEN.

KANSAS CITY, May 12.—The honey situation is a little stronger, and there is but little honey left in the hand of the dealers. Best honey bringing from \$2.25 to \$2.50 a case; amber at from 25¢@50¢ a case lower. Extracted, 4¼¢@6¢. Beeswax, 28¢.

C. C. CLEMENS & CO.

CINCINNATI, O., May 18.—The large stock of comb honey yet offered with hardly any demand causes lower prices. I quote fancy water-white at 12¢; other grades lower, in proportion. Extracted is in usual demand for this season of the year. We quote white clover 7¢@8¢; amber in barrels at 5¼¢@5½¢; in cans, 5½¢@6¢. Beeswax, 28¢.

C. H. W. WEBER.

ALBANY, N.Y., Feb. 8.—Honey market dull this extreme cold weather, especially comb, which candies or granulates and cracks easily. We quote: Fancy white, 13¢@14¢; No. 1, 12¢@13¢; mixed, 10¢@11¢; buckwheat, 10¢@11¢. Extracted, better demand: Buckwheat, 6¢@6¼¢; white, 6¢@6¼¢. Buckwheat most in demand, as the Jewish people will have no other. Beeswax, 30¢@32¢.

H. R. WRIGHT.

SAN FRANCISCO, May 3.—White comb, 1-lb. sections, 11¢@12¢; amber, 8¢@10¢. Extracted-white, 5¼¢@6¢; light amber, 4¢@5¢; amber, 3¢@3½¢; dark amber, 2¼¢@3¢. Beeswax-good to choice, light, 29¢@30¢; dark, 27¢@28¢.

The steamer City of Peking, sailing Saturday last, took 85 cases for Belgium. Movement on local account is light. Buyers are holding off, anticipating arrivals of new crop at an early day.

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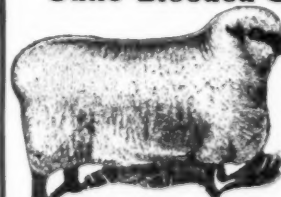
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As is customary with all large concerns we have agencies or jobbers in different parts of the United States, where our goods are carried in stock. If you are located near any of those named below it will save you time and freight charges to send your order to them. Where the distance is not so great from Watertown to the agency, these jobbers sell the goods at our regular list prices.

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CALIFORNIA

Paul Bachert, Acton
California Lumber & Milling Co.,
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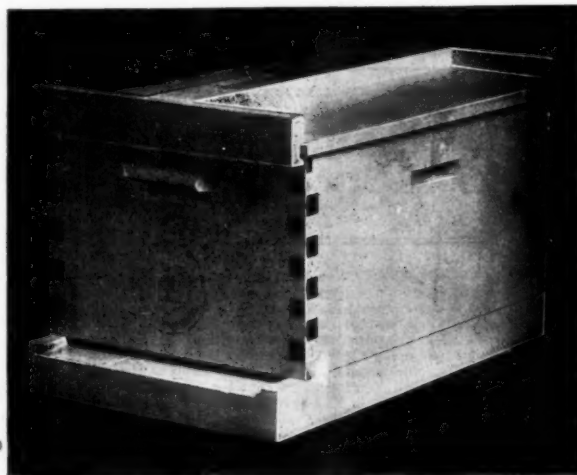
R. C. Aikin, Loveland
Arkansas Valley Honey Producers'
Association, Rocky Ford
Colorado Honey Producers' Asso-
ciation, Denver
Fruit Growers' Association, Grand
Junct. Robert Halley, Montrose

ILLINOIS

Dadant & Sons, Hamilton
York Honey & Bee Supply Co., 141
and 143 Ontario St., Chicago

INDIANA

C. M. Scott & Co., Indianapolis



IOWA

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Louis Hansen's Sons, Davenport

MICHIGAN

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MINNESOTA

Wisconsin Lumber Co., Faribault

MISSOURI

E. E. Abbott, St. Joseph

OHIO

Fred W. Muth Co., Cincinnati
Norris & Anspach, Kenton

PENNSYLVANIA

Cleaver & Greene, Troy

TEXAS

Southwestern Bee Co., 438 West
Houston St., San Antonio

UTAH

Fred Foulger & Sons, Ogden

WASHINGTON

Cas. H. Lilly Co., Seattle

Below is a fresh lot of Testimonials sent in to us unsolicited within the last 60 days:

G. B. Lewis Co., Watertown, Wis. Charlotte, N. C., April 13, 1905

Gentlemen:—The goods have been received and I am greatly pleased with them. The hives are a model of perfection both as to material and workmanship. It is a pleasure to have material go together as yours does.

Yours truly, E. W. LYLES.

G. B. Lewis Co., Watertown, Wis. Manton, Mich., April 14, 1905.

Gentlemen:—Your goods are the best I ever received from any bee-house before. They all fit like the paper on the wall.

Yours truly, H. D. SALISBURY.

G. B. Lewis Co., Watertown, Wis. McFall, Mo., April 17, 1905.

Gentlemen:—Don't you worry about our not handling your goods. We have used and sold your goods for 15 years and consider them the finest beeware made.

Yours respectfully, J. E. ENYART & SON.

G. B. Lewis Co., Watertown, Wis. Rome, Pa., May 22, 1905.

Gentlemen:—I think your sections the best I ever used.

Yours truly, W. J. HILL.

G. B. Lewis Co., Watertown, Wis. Oakland, Mo., May 22, 1905.

Gentlemen:—Your hives fit perfectly and your sections are superb.

Yours truly, ROBERT WILSON.

G. B. Lewis Co., Watertown, Wis. Fowler, Colo., May 20, 1905.

Gentlemen:—Yours of the 15th received and will say that I received your goods and think they are the best I ever saw.

Yours truly, W. C. BEVARD.

G. B. Lewis Co., Watertown, Wis. Seattle, Wash., April 13, 1905.

Gentlemen:—We know we are always well pleased when we get a carload of Lewis' goods and that our retail and trade customers like to handle your supplies. You may not hear about this so often as people are much slower to express their approval than they are their disapproval.

Yours truly, LILLY-BOGARDUS & CO.

G. B. LEWIS CO. Manufacturers of Bee-Supplies **Watertown, Wis.**